

FINAL DRAFT/PROPOSED CAAPP PERMIT
The Premcor Refining Group, Inc. - Hartford Distribution Center
I.D. No.: 119050AAA
Application No.: 96030082
May 27, 2004

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

The Premcor Refining Group, Inc. - Hartford Distribution Center
Attn: Becky Malloy, Environmental Contact
201 East Hawthorne
Hartford, Illinois 62048

Application No.: 96030082

I.D. No.: 119050AAA

Applicant's Designation:

Date Received: March 7, 1996

Operation of: Marine Terminal

Date Issued:

Expiration Date²:

Source Location: 201 East Hawthorne, Hartford, Madison County

Responsible Official: Ed Jacoby, Vice President of Wholesale, Marketing and
Distribution

This permit is hereby granted to the above-designated Permittee to OPERATE a Petroleum Bulk Storage and Loading Terminal, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Sunil Suthar at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SIS:jar

cc: Illinois EPA, FOS, Region 3
CES
Lotus Notes

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

The Premcor Refining Group, Inc. - Hartford Distribution Center
201 East Hawthorne
Hartford, Illinois 62048

I.D. No.: 119050AAA
Standard Industrial Classification: 5171, Petroleum Bulk Storage
and Loading

1.2 Owner/Parent Company

The Premcor Refining Group, Inc.
201 East Hawthorne
Hartford, Illinois 62048

1.3 Operator

The Premcor Refining Group, Inc
201 East Hawthorne
Hartford, Illinois 62048

Bill Malloy, Environmental Contact
618/254-7301 Ext. 261

1.4 General Source Description

The Premcor Refining Group, Inc. - Hartford Distribution Center
is located at 201 East Hawthorne, Hartford, Illinois. The source
is engaged in petroleum storage and distribution operations.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
ft ³	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
hp	horsepower
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	Kilogram
kPa	Kilopascals
kW	kilowatts
l	liter
lb	pound
m ³	cubic meters
mmBtu	Million British thermal units
mo	month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute
RMP	Risk Management Plan
RVP	Reid Vapor Pressure
SO ₂	Sulfur Dioxide

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T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
VPL	Volatile Petroleum Liquid
wt.	weight
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a) (1) and 201.211, as follows:

Chemical Storage Tank
Chemical Storage Drum

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a) (2) or (a) (3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a) (4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a) (10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a) (11)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

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- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 01	Vapor Control System: Control Boreholes, Knock Out Drum, Vacuum Blowers (75 Hp/Electric)	1/92	Thermal Treatment Unit (Enclosed Flare)
Unit 02	Marine Vessel Loading	1981 ^a	Vapor Recovery Unit and Flare
Unit 03	External Floating Roof Tanks: 120-1 120-2 120-3 120-4 120-5 120-8 80-4 80-5 80-10 80-11 20-8 10-20 5-10	 1947 1947 1953 1953 1953 1957 1945 1949 1953 1953 1960 1961 1954	 Floating Roof, Primary Seal and Rim-Mounted Secondary Seal, Submerged Loading
Unit 04	Internal Floating Roof Tanks:	1948/1990	Internal Floating Roof, Submerged Loading
	Group 1 Tanks ^b (Subject to 40 CFR 60, Subpart Kb): 20-3/840,000 Gal 10-10/420,000 Gal	1941/1994	
	Group 2 Tanks (Not Subject to NSPS): 10-5/420,000 Gal 10-7/420,000 Gal T-3-1/126,000 Gal	1941 1941 1956	
	Group 3 ^c (Subject to 40 CFR 60, Subpart K) Tank: 120-9/5,040,000 Gal	1975	

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Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 05	Wastewater Treatment Plant: Entry Points, Two (2) Equalization Tanks, Diffused Air Flotation (DAF) Unit, Two (2) Aeration Basins, Two (2) Clarifiers, Anthracite/Sand Filter.	1973/1994 ^d	Anthracite/Sand Filters
Unit 06	Fugitive Emissions from Paved and Unpaved Roads	---	---
Unit 07	Fugitive VOM Emissions from Valves, Flanges, Seals, and Miscellaneous Components	Not Available	Leak Detection and Repair Program
Unit 08	Gasoline Storage Tanks	Pre-1990	None

^a Refurbished in 1981. A new platform was constructed, a new pipeline was installed to the river dock. The loading berth was reconditioned and all new piping and loading arms installed.

^b Subject to 40 CFR 60, Subpart Kb

^c Subject to 40 CFR 60, Subpart K

^d Installation of two (2) equalization tanks

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM, and CO emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

- 5.2.5
- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
 - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. As a result of this application either not having been submitted or deemed complete by April 20, 1998, the source is required to comply with the requirements of 40 CFR Part 64 for large pollutant-specific emissions units in the initial application and CAAPP permit. The source must submit a CAM plan for all other affected pollutant-

specific emissions units upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	230.30
Sulfur Dioxide (SO ₂)	4.34
Particulate Matter (PM)	12.08
Nitrogen Oxides (NO _x)	35.56
HAP, not included in VOM or PM	----
Total	282.28

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Operating Scenarios

N/A

5.6.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

- a. The annual emissions of individual HAPs for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and
- b. The total annual emissions of all HAPs combined for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

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6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Vapor Control System Control: Thermal Treatment Unit (Enclosed Flare)

7.1.1 Description

Operation of a vapor control system that captures and removes hydrocarbon vapors from the vadose zone (below ground surface). The vapor control system consists of control boreholes, a knock out drum, vacuum blowers (75 hp/electric), and an enclosed flare (thermal treatment unit). All vapors from the vapor control system are routed to and through the thermal treatment unit.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Vapor Control System	Control Boreholes, Knock Out Drum, Vacuum Blowers (75 Hp/Electric)	1/92	Thermal Treatment Unit (Enclosed Flare)

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected vapor control system" for the purpose of these unit-specific conditions, is the vapor control system described in Conditions 7.1.1 and 7.1.2.
- b.
 - i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 219.301].
 - ii. Emissions of organic material in excess of those permitted by Condition 7.1.3(c) (i) are allowable if such emissions are controlled by a flame or thermal incineration (oxidizer) so as to either reduce such emissions to 10 ppm equivalent methane or less, or to convert 85

percent of the hydrocarbons to carbon dioxide
and water. [35 IAC 219.302(a)]

7.1.4 Non-Applicability of Regulations of Concern

None

7.1.5 Operational and Production Limits and Work Practices

- a. The thermal treatment unit shall be operated in a smokeless condition.
- b. The thermal treatment unit shall be in operation at all times when the affected vapor recovery system is in operation and emitting air contaminants that would not comply with Condition 7.1.3 without the use of the thermal treatment unit.
- c. The thermal treatment unit combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, emissions from the flare shall not exceed the following:

Pollutant	Emissions	
	(Lb/Hr)	(T/Yr)
VOM	3.78	16.6
CO	10.00	43.8
NO _x	1.84	8.0
PM ₁₀	1.83	8.0
SO ₂	0.93	4.1

The above limitations were established in Permit 92050052, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit do not constitute a new major source or major modification pursuant to these rules. [T1]

The limits are based on standard emission factors (AP-42), the heat input rate in condition 7.1.7(b), and 8760 hours/yr of operation. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

7.1.7 Operating Requirements

- a. The thermal treatment unit shall be equipped with a sensor to detect the presence of a flame. [T1]
- b. Total heat input to the thermal treatment unit, including thermal treatment unit gas and contaminated air shall not exceed 27 mmBtu/hr. [T1]
- c. Hydrogen Sulfide in the inlet to the thermal treatment unit shall not exceed 60 ppm. [T1]
- d. The capture system and thermal treatment unit shall be operated to reduce VOM emissions by 85% so as to comply with Condition 7.1.3(c) and (d).
- e. Flowrate of contaminated air to the thermal treatment unit and hydrocarbons in the air shall not exceed 1600 SCFM and 1200 lb/hr. [T1]

7.1.8 Monitoring Requirements

The thermal treatment unit shall be equipped with a sensor to detect the presence of a flame. [T1]

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected vapor control system to demonstrate compliance with Conditions 5.5.1, 7.1.3, 7.1.5, 7.1.7, and 7.1.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Thermal oxidizer combustion chamber temperature (continuous);
- b. VOM and HAP emissions (lb/month); and
- c. Record of time periods when the flare flame is extinguished.

7.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected vapor control system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.
- b. The Permittee shall submit an annual report of emissions listed in Condition 7.1.6 with supporting calculations. The report shall include a summary of time periods when the thermal treatment unit flame was extinguished.
- c. The Illinois EPA shall be notified of permanent shutdown of the system. Notifications shall be sent to the Illinois EPA's Regional office in Collinsville (see Condition 8.6.4(ii)).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the requirements of Condition 7.1.3(c) and (d) (35 IAC 219.141 and 219.302) is assured by compliance with the operational requirements of Condition 7.1.5, the monitoring requirements of Condition 7.1.8 and the recordkeeping requirements in Condition 7.1.9.

- 7.2 Unit 02: River Dock (Marine Vessel Loading)
Control: Vapor Recovery Unit (for Low-Vapor Pressure Materials)
and Flare (for High-Vapor Pressure Materials)

7.2.1 Description

The marine vessel loading terminal (river dock) delivers high-vapor pressure materials (e.g. gasoline products, naphtha, and rerun materials) and low-vapor pressure materials to marine vessels that operate along the Mississippi River. The river dock consists of two (2) loading berths, and can deliver product to a barge vessel at each of the berths simultaneously.

The loading apparatus is equipped with a vapor recovery hose positioned at the marine vessel loading positions for hook up to the flare. The vapor hose and associated piping transports the hydrocarbon-enriched air displaced from the marine vessels during loading to a liquid seal knockout vessel and then to the flare.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Modified	Emission Control Equipment
Unit 02	Marine Vessel Loading	1981*	Vapor Recovery Unit and Flare

* Refurbished in 1981. A new platform was constructed, a new pipeline was installed to the river dock. The loading berth was reconditioned and all new piping and loading arms installed.

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected marine vessel loading operation" for the purpose of these unit-specific conditions, is the operation as described in Conditions 7.2.1 and 7.2.2.
- b. The affected marine vessel loading operation is subject to 35 IAC Part 219, Subpart GG: Marine Terminals since the source is engaged in delivering high-vapor pressure materials to marine vessels.

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected marine vessel loading operation is not subject to 35 IAC 219.122, which requires a submerged

loading pipe when loading a volatile organic liquid (VOL) with a vapor pressure greater than 2.5 psia, because the rule is only relevant to loading operations for railroad tank car, tank truck, trailer, or stationary tank; the affected marine vessel loading operation is only engaged in the loading of marine vessels.

- b. The affected marine vessel loading not subject to 35 Ill. Adm. Code 219.120, Control Requirements for Storage Containers of VOL per 35 Ill. Adm. Code 219.119, which states that limitations of 35 Ill. Adm. Code 219.120 do not apply to vessels permanently attached to trucks, railcars, barges, or ships. [35 Ill. Adm. Code 219.119(d)]
- c. The affected marine vessel loading are not subject to 40 CFR 60, Subpart XX, Standards of Performance for Bulk Gasoline Terminals, since the affected marine vessel loading does not deliver liquid product into gasoline tank trucks as required for applicability.
- d. The affected marine vessel loading operations are not subject to 40 CFR 63, Subpart Y, National Emission Standards for Marine Tank Vessel Tank Loading Operations, since the facility has opted to accept a limit for total loading of high-vapor pressure materials to marine vessels to no greater than 9.5 million barrels per year; the rule requires 10 million barrels or 200 million barrels per year for applicability.

7.2.5 Control Requirements and Operational Limitations

- a. The affected marine vessel loading operations shall utilize vapor collection and control system to control VOM emissions from the marine terminal while loading gasoline and crude oil, so as to comply with 35 Ill. Adm. Code Part 219 Subpart GG.
- b. Pursuant to 35 Ill. Adm. Code 219.762(a), this vapor collection and control system shall meet the following requirements:
 - i. Capture the vapors displaced during the loading event and reduce overall VOM emissions by at least 95% by weight through the flare. [35 Ill. Adm. Code 219.762(a)(1)]

- ii. Be maintained and operated so that it prevents visible liquid leaks, significant odors, and visible fumes in the liquid transfer and the vapor collection lines, and appurtenances during loading. [35 Ill. Adm. Code 219.762(a)(2)]
- iii. Be certified as required by Coast Guard regulations found at 33 CFR 154. [35 Ill. Adm. Code 219.762(a)(3)]
- c. Pursuant to 35 Ill. Adm. Code 219.762(b), during the regulatory control period, gasoline or crude oil shall only be loaded into marine vessels that are:
 - i. Equipped with vapor collection equipment that has been certified as required by Coast Guard regulations found at 46 CFR 39. [35 Ill. Adm. Code 219.762(b)(1)]
 - ii. Connected to the vapor collection system. [35 Ill. Adm. Code 219.762(b)(2)]
 - iii. Vapor-tight as described in 35 Ill. Adm. Code 219.762(b)(3)(A), (b)(3)(B), (b)(3)(C), or (b)(3)(D). [35 Ill. Adm. Code 219.762(b)(3)]
- d. Total loading of high vapor pressure materials to marine vessels is limited to no greater than 9.5 million barrels per year.

7.2.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide limitations in Condition 5.5 that include this unit.

7.2.7 Testing and Monitoring Requirements

- a. Pursuant to 35 Ill. Adm. Code 219.766, the Permittee shall comply with the requirements regarding detection and repair of leaks of 35 Ill. Adm. Code 219.445 for all equipment associated with the vapor collection and control system, including (see Section 7.7 for further details):
 - i. Develop a monitoring program plan consistent with the provisions of 35 Ill. Adm. Code 219.446;

- ii. Conduct a monitoring program consistent with the provisions of 35 Ill. Adm. Code 219.447;
 - iii. Record all leaking components which have a volatile organic material concentration exceeding 10,000 ppm consistent with the provisions of 35 Ill. Adm. Code 219.448;
 - iv. Identify each component consistent with the monitoring program plan submitted pursuant to 35 Ill. Adm. Code 219.446;
 - v. Repair and retest the leaking components as soon as possible within 22 days after the leak is found, but no later than June 1 for the purposes of 35 Ill. Adm. Code 219.447(a) (1), unless the leaking components cannot be repaired until the unit is shut down for turnaround; and
 - vi. Report to the Illinois EPA consistent with the provisions of 35 Ill. Adm. Code 219.449.
- b. Compliance with 35 IAC Section 219.762(a) (2) of this Subpart shall be determined by visual inspection and by the leak detection methods contained in Section 219.105(g) of this Part.
- c. If the control device used to comply with 35 IAC Section 219.762(a) (1) of this Subpart is a flare, compliance shall be determined by methods described in 35 IAC Section 219.429(c).
- d. Compliance with 35 IAC Section 219.762(b) (3) of this Subpart shall be determined by one of the methods described in this Section:
- i. A marine vessel loaded in accordance with 35 IAC Section 219.762(b) (3) (A) of this Subpart through the use of a vacuum assisted vapor collection system is assumed to be vapor-tight for the purposes of this Subpart.
 - ii. A vapor-tightness test for marine vessels shall be conducted to include the final 20 percent of loading of each product tank of the marine vessel, and it shall be applied to any potential sources of vapor leaks on the vessel

pursuant to Method 21 of 40 CFR 60, Appendix A, incorporated by reference at 35 IAC Section 219.112 of this Part. A reading of 10,000 ppmv or greater as methane shall constitute a leak.

- iii. As an alternative to subsection (d)(2) of this Section, an owner or operator of a marine terminal may use the vapor-tightness test described in 40 CFR 61.304(f), incorporated by reference at 35 IAC Section 219.112 of this Part.
- f. When in the opinion of the Agency or USEPA it is necessary to conduct testing to demonstrate compliance with or verify effectiveness of the vapor collection and control system required by 35 IAC Section 219.762(a), (c)(1), or (c)(3) of this Subpart, the owner or operator of a marine terminal shall, at its own expense, conduct such tests in accordance with the applicable test methods and procedures specified in subsections (a), (b), or (c) of this Section, as applicable.
- g. An owner or operator of a marine terminal planning to conduct a VOM emissions test to demonstrate compliance with 35 IAC Sections 219.762(a), (c)(1), or (c)(3) of this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so that the Agency may observe the test

7.2.8 Inspection and Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

a. General Recordkeeping

The Permittee shall maintain records of the following for each affected marine vessel loading operations to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.6:

- i. The identification and properties of each organic liquid distributed through each affected loading rack, as related to emissions, i.e., vapor pressure and molecular weight;

- ii. The amount of each organic liquid distributed through each affected loading rack, gallons per month and gallons per year, with annual records updated each month by totaling the throughput for that month plus the preceding 11 months;
 - iii. The number of components (i.e., valves, pump seals, etc.) in light liquid, heavy liquid or gas service, as applicable;
 - iv. Emissions of VOM attributable to loading of petroleum products, tons/month and tons/year, with supporting calculations, calculated utilizing an approved USEPA methodology, such as Section 5.2 of the AP-42 and the control efficiency of a VRU as demonstrated in the most recent test, with annual records updated each month by totaling the throughput for that month plus the preceding 11 months (See Condition 7.1.12(c) for gasoline loading); and
 - v. Emissions of VOM attributable to fugitive losses (valves, pump seals, etc.), tons/month and tons/year, with supporting calculations, calculated utilizing an approved USEPA methodology.
- b. The owner or operator of sources complying with 35 IAC Sections 219.762(a) and (b), or (c)(1), or (c)(3) of this Subpart shall maintain records regarding the marine terminal, and each time a marine vessel is loaded during the regulatory control period. The records shall include but are not limited to:
- i. The date(s) and the time(s) at which the marine vessel was loaded from the marine terminal;
 - ii. The name, type, identification number, and owner of the vessel loaded;
 - iii. The type and amount of liquid loaded into the marine vessel;
 - iv. Records of any leaks found, repair attempts, and the results of the required fugitive monitoring and maintenance program, including

appropriate dates, test methods, instrument readings, repair results, and corrective action taken as required by 35 IAC Sections 219.762(a)(2) and 219.766 of this Subpart;

- v. A copy of the Coast Guard certification demonstrating that the marine terminal's vapor collection and control system has been certified as required by Coast Guard regulations found at 33 CFR 154; and
 - vi. A copy of the Coast Guard certification demonstrating that the marine vessel has been inspected and certified as required by Coast Guard regulations found at 46 CFR 39. If a copy of the Coast Guard certificate is not available at the time of loading, then the date that the marine vessel was last inspected and the authorization that the marine vessel has functioning vapor control equipment must be recorded from the certificate. Further, a copy of the certificate must be obtained by the owner or operator of the marine terminal within 21 days after the loading event.
- c. Owners or operators complying with 35 IAC Sections 219.762(b)(3)(B), (b)(3)(C), or (b)(3)(D) shall additionally maintain the following records concerning the vapor-tightness of the marine vessel:
- i. Test title;
 - ii. Owner of the marine vessel tested;
 - iii. The identification number of the marine vessel tested;
 - iv. Testing location;
 - v. Tester name and signature;
 - vi. Witnessing inspector, name, signature, and affiliation; and
 - vii. Test results.
- d. Owners or operators complying with the requirements of 35 IAC Section 219.762(c)(2) of this Subpart shall maintain records of daily product volumes loaded to

demonstrate that the applicable emission reduction specified in Appendix E of this Part has been achieved.

- e. Owners or operators certifying compliance under 35 IAC Section 219.764(c) shall maintain the records specified in subsections (b)(1), (b)(2), and (b)(3) above.
- f. All records required by subsections (b), (c), (d), and (e) of this Section shall be maintained for at least three years and shall be made available to the Agency upon request.
- g. Total natural gas usage for flare (ft³/mo)

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected marine vessel loading operations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected loading rack without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

None

7.2.12 Compliance Procedures

- a. Compliance with the operational limitations of Condition 7.2.5(a), shall be demonstrated through the inspection/monitoring, recordkeeping and reporting requirements of Conditions 7.2.8, 7.2.9, and 7.2.10 and the compliance procedures in 7.2.12(c) and (d).
- b. Compliance with the control requirements of 7.2.5(a) shall be demonstrated by the inspection/monitoring,

recordkeeping and reporting requirements of Conditions 7.2.8, 7.2.9, and 7.2.10 and the fact that compliance of loading rack and associated vapor recovery unit have previously been demonstrated by fulfillment of the test requirements of 40 CFR 60.8 by measurement of the total organic concentration(s) in the effluent stream of the vapor recovery system pursuant to 40 CFR 60.503.

- c. VOM and HAP emission from the loading shall be calculated by use of the following equations:

i.
$$\text{Total VOM Emissions (lb)} = \text{Throughput (gallons)} \times \text{EF}^* \times (1 - \text{Control Efficiency of Flare}/100)$$

Where:

Throughput = Loading Rack Throughput as Determined by the Records Required in 7.2.9(a)
Control Efficiency of Flare = 97 %

* Emission Factors as provided in the Title 5 application

ii.
$$\text{HAP emissions} = \text{VOM emissions} \times \text{EF}^{**}$$

Material Loaded	Emission Factor lb/1000 Gallon
Gasoline	3.90
Distillate Fuel Oil	0.012

** Emission Factors as provided in the Title 5 application

HAP	HAP to VOM Emission Factor (% by Wt.) for Gasoline	HAP to VOM Emission Factor (% by Wt.) for Distillate Fuel Oil No. 2
Benzene	0.53	12.38
Cumene	0.02	0.37
Ethylbenzene	0.06	0.38
Hexane	4.43	24.76
Toluene	0.84	4.36
Xylene	0.24	2.45
2,2,4-Trimethylpentane	0.99	0.28

- d. Emissions from the flare burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (Lb/mmBtu)</u>
NO _x ¹	0.068
PM/PM ₁₀ ^{2, 3}	7.6
SO ₂ ^{2,3}	0.6
CO ¹	0.37

¹ Emissions calculated using emission factors from AP-42, Table 13.5-1, Emission Factors for Flare Operations.

² These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Table 1.4-2, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

³ Emissions calculated assuming that natural gas and gasoline have similar quantities of PM and SO₂ resulting from combustion

Flare Emissions (Ton) = Natural Gas Consumed
Multiplied by the Appropriate Emission
Factor/2,000.

7.3 Unit 03: External Floating Roof Storage Tanks
Control: Floating Roof, Double Seals and Submerged Loading

7.3.1 Description

The terminal has a number of storage tanks used to store gasoline (RVP 15), ethanol, and all VPLs with vapor pressure lower than gasoline.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03	External Floating Roof Tanks:		
	120-1	1947	Floating Roof, Primary Seal and Rim-Mounted Secondary Seal, Submerged Loading
	120-2	1947	
	120-3	1953	
	120-4	1953	
	102-5	1953	
	120-8	1957	
	80-4	1945	
	80-5	1949	
	80-10	1953	
	80-11	1953	
	20-8	1960	
	10-20	1961	
	5-10	1954	

7.3.3 Applicability Provisions

- a. An "affected tank," for the purposes of these unit-specific conditions, is a storage tank that is only subject to the requirements of 35 IAC 219.121, 219.122(b), 219.123, and 219.124. Each storage tank with a capacity of 151.42 cubic meters (approx. 40,000 gallons) or more, storing volatile petroleum liquid (VPL), equipped with an external floating roof is subject to the requirements of 35 IAC 219.124(a) unless it is exempted pursuant to 35 IAC 219.124(b). A tank also may be exempt due to the current service, features, or other circumstances associated with the tank. A tank must comply with other rules if the vapor pressure of the VPL is 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F).

As of the "date issued" as shown on page 1 of this permit, the affected tanks are identified in Condition 7.3.2. The status of all storage tanks at this source, including affected tanks that are subject to 35 IAC 218.124(a), is summarized in Attachment 1.

- b. When storing a volatile organic liquid (VOL, e.g. ethanol), each tank is subject to 35 IAC 219.120(a)(3) which requires double seals. Compliance with Condition 7.3.5, 7.3.7 and 7.3.8 shall be deemed compliance with this requirement.

7.3.4 Non-Applicable Regulations

None

7.3.5 Control Requirements

Each affected tank shall be equipped with the following:

- a. A floating roof which rests on the surface of the VOL that is equipped with a primary seal [35 IAC 219.121(b)(1)];
- b. A floating roof that is equipped with a continuous seal extending from the floating roof to the tank wall (rim mounted secondary seal) [35 IAC 219.124(a)(1)] (The Illinois EPA has not approved use of other equivalent equipment in lieu of a rim-mounted secondary seal.);
- c. All drains (for drainage of rainwater, also know as "stub drains") in the floating roof deck shall be provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening [35 IAC 219.124(a)(3)];
- d. All openings of the floating roof deck, other than drains, shall be equipped with projections into the tank which remain below the liquid surface at all times except when supported on the roof legs and be equipped with covers, lids or seals [35 IAC 219.124(a)(4)]; and
- e. A permanent submerged loading pipe. [35 IAC 219.122(b)]

7.3.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

None

7.3.7 Operating Requirements

- a. Each affected tank shall be operated so that the floating roof including the seal closure devices meet the following requirements:
 - i. There shall be no visible holes, tears, or other defects in the seal or any seal fabric or material of the floating roof [35 IAC 219.123(b) (2)];
 - ii. The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall [35 IAC 219.124(a) (2) (A)];
 - iii. The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inch per foot of tank diameter) [35 IAC 219.124(a) (2) (B)]; and
 - iv. The covers, lids or seals on openings of the floating roof deck other than stub drains shall be operated such that the following requirements are met:
 - A. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank [35 IAC 219.123(b) (3) (A)];
 - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports [35 IAC 219.123(b) (3) (B)]; and
 - C. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the

manufacturer's recommended setting [35
IAC 219.123(b) (3) (C)].

- b. No person shall cause or allow the emissions of air contaminants into the atmosphere from any gauging or sampling devices attached to an affected tank, except during sampling or maintenance operations [35 IAC 219.121 (b) (1)].

7.3.8 Inspection Requirements

- a. The Permittee shall inspect each affected tank prior to May 1 of each year, to insure compliance with the applicable control and operating requirements [35 IAC 219.124(a) (5)].
- b.
 - i. The Permittee shall measure the secondary seal gap of each affected tank prior to May 1 of each year. This measurement shall be conducted in accordance with the methods and procedures specified in 40 CFR 60, Subpart Kb [35 IAC 219.124(a) (6)].
 - ii. Prior notification for the above measurements shall be given to the Illinois EPA as specified in Condition 7.3.10(b).
- c. The Permittee shall perform a complete inspection of the cover and seals of each affected tank whenever the tank is emptied and degassed for any reasons other than the transfer of liquid during the normal operation of the tank, or whenever repairs are made that require degassing of the tank as a result of any semi-annual inspection or incidence of roof damage or defect [35 IAC 219.123(b) (5)].

7.3.9 Recordkeeping Requirements

- a. In addition to the records required by Condition 5.6 (requiring records of throughput and emissions), the Permittee shall maintain records of the following items for each affected tank, pursuant to 35 IAC 219.123(b) (6) and 219.124(a) (7):
 - i. A list of the types of volatile petroleum liquid stored on a monthly basis;
 - ii. The maximum true vapor pressure of each type of liquid as stored, psia;

- iii. The results of any inspections or measurements required by the Condition 7.3.8(a), (b) and/or (c), including:
 - A. Type of inspection;
 - B. When the inspection and/or measurement was performed;
 - C. Who performed the inspection and/or measurement;
 - D. The method of inspection and/or measurement;
 - E. The observed condition of each feature of the external floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement; and
 - F. Summary of compliance.
- b. The Permittee shall maintain records of the following for each affected tank to demonstrate compliance with Condition 7.3.8(c) (Cover and Seal Inspection) [35 IAC 219.123(b) (6)]:

Records that are sufficient to identify whenever the tank is emptied and degassed for any reason other than the transfer of liquid during normal operation or whenever repairs are made as a result of regular inspections or incident of roof damage or defect.

7.3.10 Reporting Requirements

- a. The Permittee shall notify the Illinois EPA, Compliance Section and Regional Field Office, at least 30 days before the planned performance of seal gap measurements, pursuant to Section 39.5(7)(f) of the Act, so the Illinois EPA may observe the measurements.
- b. The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the control, operating, or inspection requirements, as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- i. Any storage of VPL in an affected tank that is not in compliance with the control requirements (due to absence of the features required by Condition 7.3.5, e.g., "no rim-mounted secondary seal,") within 5 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
- ii. Any storage of VPL in an affected tank that is out of compliance with the control requirements (Condition 7.3.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. Changes in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.3 of this permit.
- b. The primary seals may be replaced with the same or a different type. Secondary seals may be replaced but must be rim-mounted.

7.3.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program, AP-42 upon which the Tanks Program is based, or any

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other method that utilizes USEPA approved emission factors for storage tank emissions.

- b. For the purpose of estimating HAP emissions from equipment at the facility, the vapor wt percent (based on a 1992 USEPA survey or calculations based upon the applicable MSDS for the specific VOL) of each HAP for each product times the VOM emissions contributed by that product is acceptable. Other means of estimating HAP emissions utilizing USEPA accepted methodologies is also acceptable.

7.4 Unit 04: Internal Floating Roof Storage Tanks
Control: Floating Roof and Seals, Permanent Submerged Loading

7.4.1 Description

The Permittee operates a six (6) internal floating roof storage tanks to store gasoline (RVP 15), ethanol, and all VPLs with vapor pressure lower than gasoline. Permanent submerged loading is an inherent part of this design since there is no vapor space.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/Modified	Emission Control Equipment
Unit 04	Group 1 Tanks*: 20-3/840,000 Gal 10-10/420,000 Gal	1948/1990 1941/1994	Internal Floating Roof, Submerged Loading
	Group 2 Tanks (Not Subject to NSPS): 10-5/420,000 Gal 10-7/420,000 Gal T-3-1/ 126,000 Gal	1941 1941 1956	
	Group 3 Tank** 120-9/5,040,000 Gal	1975	

* Subject to 40 CFR 60, Subpart Kb

** subject to 40 CFR 60, Subpart K

7.4.3 Applicability Provisions and Applicable Regulations

- a. The affected tanks, for the purpose of these unit specific conditions, are the tanks as described in Conditions 7.4.1 and 7.4.2.
- b. An "affected tank" of group 1, for the purposes of these unit specific conditions, are the storage tanks that are subject to the control requirement of 40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984); these tanks rely on an internal floating roof for compliance. A storage tank constructed, reconstructed, or modified after July 23, 1984 is subject to the control requirements of 40 CFR 60 Subpart Kb if it has a capacity greater than or equal to 20,000 gallons (75 m³) storing a VOL

with a maximum true vapor pressure of 15 kPa (2.2 psia) or more or a capacity greater than or equal to 40,000 gallons (151 m³) storing a VOL with a maximum true vapor pressure of 3.5 kPa (0.5 psia) or more.

As of the "date issued" as shown on page 1 of this permit, the affected tanks are identified in Condition 7.4.2.

- c. Each storage tank subject to 40 CFR 60 Subpart Kb is hereby shielded from compliance with 35 IAC 219.121. This shield is issued to streamline the applicable requirements for the source, based on the Illinois EPA's finding that compliance with 40 CFR 60, Subpart Kb assures compliance with 35 IAC 219.121, following the review requirements of 40 CFR 60 Subpart Kb and 35 IAC 219.121.
- d. The "affected tanks" of group 2, for the purposes of these unit-specific conditions, are the storage tanks that are subject to the requirements of 35 IAC 219.121, 219.122(b), and 219.123. Each storage tank with a capacity of 151.42 cubic meters (approx. 40,000 gallons) or more, storing volatile petroleum liquid (VPL), is subject to the requirements of 35 IAC 219.123(b) unless it is specifically excluded pursuant to 35 IAC 219.123(a). Group 1 and 2 tanks are exempt from some of the requirements based on applicability of a NSPS [35 IAC 219.123(a)(5)]. A tank also may be exempt due to the current service, features, or other circumstances associated with the tank (See Condition 5.8). A tank must comply with other rules if the vapor pressure of the VPL is 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F).

When in VOL service (e.g., storing ethanol), an "affected tank," for the purposes of these unit-specific conditions, is a storage tank subject to the requirements of 35 IAC 219.120(a) and 219.122(b) that relies upon a permanent submerged loading pipe and internal floating roof for compliance. An affected storage tank is subject to the control requirements of 35 IAC 219.120(a) if it has a capacity greater than or equal to 40,000 gallons storing a VOL with a vapor pressure of 0.75 psia or more but less than or equal to a maximum true vapor pressure of 11.1 psia. [35 IAC 219.120(a)(1)]

As of the "date issued" as shown on page 1 of this permit, the affected tanks are identified in Condition 7.4.2.

- e. Tank 120-9 is subject to the control requirement of 40 CFR 60 Subpart K (Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978) and relies on an internal floating roof for compliance. A storage tank constructed, reconstructed, or modified after March 8, 1974, and prior to May 19, 1978 is subject to the control requirements of 40 CFR 60 Subpart K that has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons); alternatively, a storage tank may be subject to 40 CFR 60 Subpart K if it has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.
- f. Each affected tank is subject to the emission limits identified in Condition 5.2.2.

7.4.4 Non-Applicability of Regulations of Concern

- a. Groups 1 tanks and 120-9 tank are not subject to 35 IAC 219.123 when in VPL service because they are subject to a NSPS [35 IAC 219.123(a)(5)]. Though these tanks are subject to 35 IAC 219.121, compliance with Subpart Ka or Kb is deemed to be more stringent and will demonstrate compliance with 35 IAC 219.121.
- c. The affected tanks are not subject to 35 IAC 219.124 because the tanks are considered internal floating roof tanks.
- d. This permit is issued based on the affected storage tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage tanks uses a passive control measure, such as a seal, lid, or roof, that is not considered a control device because it acts to prevent the release of pollutants.

7.4.5 Control Requirements and Work Practices

- a. Each affected tank of Group 1 and tank 120-9 shall comply with the requirements of 40 CFR

60.112b(a)(1)(i) and 40 CFR 60.112(a)(1), respectively, which requires the use of a floating roof that is equipped with one of the following closure devices:

- i. A foam-filled or liquid-filled liquid-mounted seal; or
 - ii. Two continuous seals; or
 - iii. A mechanical shoe seal
- b. Each affected tanks shall also be equipped with a permanent submerged loading pipe, pursuant to 35 IAC 219.122(b).
- c. When storing a VPL with a vapor pressure of 1.5 psia or greater and VOL with a vapor pressure of 1.5 psia or greater storage tanks of group 1 and tank 120-9 shall be equipped with a floating roof which rests on the surface of the VOL that is equipped with a primary seal [35 IAC 219.121(b)(1) and 40 CFR 60.112a(a)(2)];
- d. For storage tanks of group 1 and tank 120-9 all openings of the floating roof deck, other than drains, shall be equipped with covers, lids or seals [35 IAC 219.123(b)(3)]; and
- e. When any tank is in ethanol (VOL) service the following control requirements apply:
- i. An internal floating roof which shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [35 IAC 219.120(a)(1)(A)]
 - ii. Each internal floating roof shall be equipped with one of the following closure devices

between the wall of the storage vessel and the edge of the internal floating roof [35 IAC 219.120(a)(1)(B)]:

- A. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
 - B. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or
 - C. A mechanical shoe seal, which is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- iii. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. [35 IAC 219.120(a)(1)(C)]
- iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [35 IAC 219.120(a)(1)(D)]

- v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [35 IAC 219.120(a)(1)(E)]
- vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [35 IAC 219.120(a)(1)(F)]
- vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [35 IAC 219.120(a)(1)(G)]
- viii. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [35 IAC 219.120(a)(1)(H)]

7.4.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

None

7.4.7 Operating Requirements

Each affected group 1 tank shall be operated in compliance with the operating requirements of 40 CFR 60.112b(a)(1) and 60.113b(a), as follows:

- a. The internal floating roof shall float on the liquid surface at all times, except during those intervals when the storage tank is being completely emptied and subsequently refilled and the roof rests on its leg supports. When the roof is resting on its leg supports, the process of emptying or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(1)(i)]
 - i. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space

vents shall provide a projection below the liquid surface. [40 CFR 60.112b(a)(1)(iii)]

- ii. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid which is maintained in a closed position at all times (i.e., no visible gaps) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 CFR 60.112b(a)(1)(iv)]
- iii. Automatic bleeder vents shall be equipped with a gasket and be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112b(a)(1)(v)]
- iv. Rim space vents shall be equipped with a gasket and be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR 60.112b(a)(1)(vi)]
- v. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR 60.112b(a)(1)(vii)]
- vi. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR 60.112b(a)(1)(viii)]
- vii. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)]
- viii. A tank that is in-service shall be repaired or emptied upon identification in an inspection that the floating roof is not resting on the surface of the VOL, there is liquid

accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric. These actions shall be completed within 45 days of the inspection unless an extension is granted. [40 CFR 60.113b(a)(2) and (a)(3)(ii)]

- ix. A tank that is empty shall be repaired prior to refilling the tank upon identification in an inspection that the floating roof has defects, the primary seal has holes, tears or other openings in the seal or seal fabric, or the secondary seal has holes, tears or other openings in the seal or seal fabric, or the gaskets no longer close off. [40 CFR 60.113b(a)(3)(ii) and (a)(4)]
- x. Group 2 storage tanks shall be operated so that the floating roof including the seal closure devices meet each of the following requirements:
 - A. There shall be no visible holes, tears, or other defects in the seal or any seal fabric or material of the floating roof [35 IAC 219.123(b)(2)];
 - B. The covers, lids or seals on openings of the floating roof deck other than stub drains shall be operated such that the following requirements are met:
 - 1. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank [35 IAC 219.123(b)(3)(A)];
 - 2. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports [35 IAC 219.123(b)(3)(B)]; and
 - 3. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting [35 IAC 219.123(b)(3)(C)].

- b. No person shall cause or allow the emissions of air contaminants into the atmosphere from any gauging or sampling devices attached to an affected Group 1 or Group 2 tank, except during sampling or maintenance operations [35 IAC 219.121 (b)(1)].

7.4.8 Inspection Requirements

- a. The Permittee shall fulfill the applicable testing and procedures requirements of 40 CFR 60.113b(a) for each tank of Group 1 equipped with an internal floating roof as follows:
 - i. Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once ever 12 months (Annual Inspection) to identify any deficiency or shortcoming in the roof's features, (i.e., the internal floating roof is not resting on the surface of the VOL inside the storage tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric) that the Permittee must repair or otherwise remove the storage tank from service. [40 CFR 60.113b(a)(2) and (a)(3)(ii)]
 - ii. Visually inspect the internal floating roof the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes (if any), and sleeve seals (if any) each time the storage vessel is emptied and degassed (Out-of Service Inspection) to identify any deficiency or shortcoming in the roof's features, (i.e., internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area) that the Permittee shall repair the features prior to refilling the storage tank with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10

years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and (a)(3(ii)) and at intervals no greater than 5 years in the case of vessels specified in 40 CFR 60.113b(a)(3)(i). [40 CFR 60.113b(a)(3)(i) and (a)(4)]

- iii. Prior notification for the above inspection shall be given to the Illinois EPA as specified in Condition 7.4.10(a)(ii).
- b. The Permittee shall inspect the floating roof seals of each affected Group 2 tank when storing a VPL with a vapor pressure of 1.5 psia or greater once every six months. Compliance will be demonstrated with the timing of the inspections if two inspections occur within a calendar year with one taking place in January through June and the second taking place in July through December; or if the inspections are not more than 190 days apart. [35 IAC 219.123(b)(4)].
- c. The Permittee shall perform a complete inspection of the cover and seals of each affected Group 2 tank whenever the tank is emptied and degassed for any reasons other than the transfer of liquid during the normal operation of the tank, or whenever repairs are made that require the tank to be emptied and degassed as a result of any semi-annual inspection or incidence of roof damage or defect [35 IAC 219.123(b)(5)].
- d. When any tank is in ethanol service (VOL), the following inspection requirements will apply:
 - i. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service) prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel. [35 IAC 219.127(a)(1)]
 - ii. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months

after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or if there is liquid accumulated on the roof, or if the seal is detached, or if there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this subsection cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the owner or operator may request a 30-day extension from the Illinois EPA in the inspection report required in 35 IAC 218.129(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the control equipment will be repaired or the vessel will be emptied within 30 days. [35 IAC 219.127(a)(2)]

- iii. For vessels equipped with both primary and secondary seals:
 - A. Visually inspect the vessel as specified in subsection (iv) below at least every 5 years; or
 - B. Visually inspect the vessel as specified in subsection (ii) above.
- iv. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal, or if the seal fabric or the secondary seal has holes, tears, or other openings in the seal, or if the seal fabric or the gaskets no longer close off the liquid surfaces from the atmosphere, or if the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subsection exist

before refilling the storage vessel with VOL.
In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels subject to the annual visual inspection as specified in subsections (ii) and (iii)(B) above and at intervals no greater than 5 years in the case of vessels specified in subsection (iii)(A) above.

- v. Notify the Illinois EPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by subsections (i) and (iv) above to afford the Illinois EPA the opportunity to have an observer present. If the inspection required by subsection (iv) above is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Illinois EPA at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Illinois EPA at least 7 days prior to the refilling. [35 IAC 219.127(a)(5)]

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected storage tank to demonstrate compliance with Conditions 5.5.1, 7.4.3, 7.4.5, 7.4.6, 7.4.7, and 7.4.8, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall fulfill the applicable recordkeeping requirements of 40 CFR 60.115b for each affected Group 1 tanks pursuant to 40 CFR 60.115b(a), as follows:

Keep a record of each Annual and Out-of-Service Inspection performed as required by Condition 7.4.8(a)(i)-(ii). [40 CFR 60.115b(a)(2)]

- i. The date the inspection was performed;

- ii. Who performed the inspection;
 - iii. The method of inspection;
 - iv. The observed condition of each feature of the internal floating roof (seals, roof decks and fittings), with the raw data recorded during the inspection; and
 - v. Summary of compliance.
- b. The Permittee shall maintain records of the following for each affected tank to demonstrate compliance with the Out-of-Service Inspection requirements of Conditions 7.4.8(a)(ii), 7.4.8(c) and 7.4.8(d)(iv):
- Records that are sufficient to identify whenever the tank is empty for any reason or whenever repairs are made as a result of regular inspection or incident of roof damage or defect.
- c. The Permittee shall keep the operating records required by 40 CFR 60.116b for each affected tanks of group 1, as follows:
- Records of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. [40 CFR 60.116b(c)]
- d. In addition to the records required by Condition 5.6 (requiring records of throughput and emissions), the Permittee shall maintain records of the following items for each affected tank (Group 2) in VPL service, pursuant to 35 IAC 215.123(b)(6) or 40 CFR 60.113:
- i. A list of the types of volatile petroleum liquid stored on a monthly basis;
 - ii. The maximum true vapor pressure of each type of liquid as stored, psia; and
 - iii. For Group 2 tanks the results of any inspections or measurements required by the Condition 7.4.8(a) and/or (b), including:
 - A. Type of inspection;

- B. When the inspection and/or measurement was performed;
 - C. Who performed the inspection and/or measurement;
 - D. The method of inspection and/or measurement;
 - E. The observed condition of each feature of the external floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement; and
 - F. Summary of compliance.
- e. The Permittee shall maintain records of the following for each affected Group 2 tank to demonstrate compliance with Condition 7.4.8(b) (Cover and Seal Inspection) [35 IAC 219.123(b) (6)]:
- Records that are sufficient to identify whenever the tank is emptied for any reason other than the transfer of liquid during normal operation or whenever repairs are made as a result of regular inspections or incident of roof damage or defect.
- f. When any tank is in VOL service (ethanol) the Permittee shall maintain records and furnish reports as required below.
- i. Keep a record of each inspection performed as required by Condition 7.4.8(c). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings);
 - ii. If any of the conditions described in Condition 7.4.8(c) are detected during the annual visual inspection required, report to the Illinois EPA within 30 days after the inspection the identity of the storage vessel, the nature of the defects, and the date the

storage vessel was emptied or the nature of
and date the repair was made; and

- iii. After each inspection required Condition 7.4.8(c)(iii) where holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Condition 7.4.8(c) are discovered, report to the Illinois EPA within 30 days after the inspection the identity of the storage vessel and the reason it did not meet the specifications of Conditions 7.4.5(e) or 7.4.8(c) and list each repair made. [35 IAC 219.127(a)]

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected storage tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall submit written notifications and reports to the Illinois EPA, Compliance Section as required by the NSPS, for each affected tank, as follows:
 - i. A report identifying any deficiencies or shortcomings identified in the Annual Inspection required by Condition 7.4.8(a) within 30 days of inspection. This report shall include the information specified in 40 CFR 60.115b(a)(3).
 - ii. A. Notification at least 30 days prior to refilling an affected group 1 tank for which an Out-of-Service inspection is required by Condition 7.4.8(b)(i) to afford the Illinois EPA with the opportunity to have an observer present. [40 CFR 60.113b(a)(5)]

B. If the inspection is not planned and the owner or operator of the group 1 tank could not have known about refilling the tank 30 days in advance, a shorter notification may be accepted as provided for in 40 CFR 60.113b(a)(5).

- iii. A report identifying any deficiencies or shortcomings identified in the Out-of-Service Inspection within 30 days of the inspection required by Condition 7.4.8(b)(i). This report shall include the information specified in 40 CFR 60.115b(a)(4).
- b. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:
 - i. Any storage of VOL in an affected tank that is not in compliance with the control requirements due to absence of the features required by Condition 7.4.5, e.g., no "secondary seal," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.
 - ii. Any storage of VOL in an affected tank that is out of compliance with the control requirements (Condition 7.4.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
 - iii. Any exceedance of the emission and operational limits shown in Conditions 7.4.6(b) and 7.4.7(b), respectively.
- c. Any storage of VPL in an affected tank that is not in compliance with the control requirements (due to absence of the features required by Condition 7.4.5, e.g., "no permanent submerged loading pipe," within 5 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

- d. Any storage of VPL in an affected tank that is out of compliance with the control requirements (Condition 7.4.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected storage tanks without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. Changes in the material stored in a tank, provided the tank continues to comply with the Condition 7.4.5 of this permit.
- b. The primary seals may be replaced with the same or a different type. Secondary seals may be replaced but must be rim-mounted.

7.4.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program, AP-42 upon which the TANKS program is based, or any other method that utilizes USEPA approved emission factors for storage tank emissions.
- b. For the purpose of estimating HAP emissions from equipment at the facility, the vapor wt. percent (based on a 1992 USEPA survey or calculations based upon the applicable MSDS for the specific VOL) of each HAP for each product times the VOM emissions contributed by that product is acceptable. Other means of establishing HAP emissions utilizing USEPA accepted methodologies is also acceptable.

7.5 Unit 05: Wastewater Treatment System and Thermal Oxidizer
Control: None

7.5.1 Description

The wastewater treatment plant is used to treat wastewater that is potentially contaminated with oily hydrocarbons prior to discharge to the Mississippi River. Potential sources of wastewater treated at the plant include stormwater from Premcor Hartford Distribution Center or portion of the former Premcor Hartford Refinery (now owned by Conoco Phillips Wood River Refinery) and non-rain event water. Non-rain event water may include, but is not limited to: groundwater, tank bottom water, tank cleaning water, hydrostatic test water, boiler and cooling tower blowdown water (from Conoco Phillips) and small miscellaneous sources including water from pump cleanings, truck washings, etc.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed/Modified	Emission Control Equipment
Unit 05	Wastewater Treatment Plant: Entry Points, Two (2) Equalization Tanks, Diffused Air Flotation (DAF) Unit, Two (2) Aeration Basins, Two (2) Clarifiers, Anthracite/Sand Filter.	1973/1994*	Anthracite/Sand Filters

*Installation of two (2) equalization tanks (T-161, T-162)

7.5.3 Applicability Provisions and Applicable Regulations

- a. An "affected wastewater treatment system" for the purpose of these unit-specific conditions, is the wastewater treatment system described in Conditions 7.5.1 and 7.5.2.
- b. The affected wastewater treatment system is subject to the emission limits identified in Condition 5.2.2.
- c. i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission

unit, except as provided in 35 IAC 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 219.301].

- ii. Emissions of organic material in excess of those permitted by Condition 7.5.3(c) (i) are allowable if such emissions are controlled by a flame or thermal incineration (oxidizer) so as to either reduce such emissions to 10 ppm equivalent methane or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water [35 IAC 219.302(a)].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected wastewater treatment system is not subject to the NSPS for VOC Emissions From Petroleum Refinery Wastewater Systems, 40 CFR 60 Subpart QQQ, because the affected wastewater treatment operations are not located at a petroleum refinery.
- b. The affected wastewater treatment system is not subject to 35 IAC 219.443, Wastewater (Oil/Water) Separator, because the affected wastewater treatment operations are not located at a petroleum refinery.
- c. This permit is issued based on the affected wastewater treatment system not being subject to 35 IAC 219 Subpart TT, Other Emission Units, because the affected wastewater treatment operations do not meet the applicability of 35 IAC 219.980(a). In particular, the affected wastewater treatment operations have maximum theoretical emissions of VOM that are less than 90.7 Mg (100 tons) per year.
- d. The affected wastewater treatment system is not subject to 35 IAC 219.141(a), as applicability requires use any single or multiple compartment effluent water separator which receives effluent water containing 757 l/day (200 gal/day) or more of organic material from any equipment processing, refining, treating, storing or handling organic material; the affected wastewater treatment operations do not meet this threshold.

7.5.5 Operational and Production Limits and Work Practices

- a. Records addressing use of good operating practices for the filters:
 - i. Records for periodic inspection of the filters with date, name of individual performing the inspection, and the nature of the inspection.
 - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

7.5.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

None

7.5.7 Operating Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected wastewater treatment system to demonstrate compliance with Conditions 5.5.1, 7.5.3, 7.5.5, 7.5.7, and 7.5.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Inputs for the Water9 software in order to calculate emissions for the affected wastewater treatment operations;
- b. The amount of wastewater treated, gal/day and gal/year; and
- c. VOM and HAP emissions (lb/month and ton/yr).

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected wastewater treatment system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Compliance with the requirements of Condition 7.5.3(c) (219.302) is assured by compliance with the operational requirements of Condition 7.5.5, the monitoring requirements of Condition 7.5.8 and the recordkeeping requirements in Condition 7.5.9 along with the use of software (as approved by the USEPA) to calculate emissions from the affected wastewater treatment system.

7.6 Unit 06: Fugitive Emissions - Paved and Unpaved Roadways

7.6.1 Description

Moving vehicles create particulate matter (road dust) emissions on paved and unpaved roadways.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 06	Fugitive Emissions from Paved and Unpaved Roads	---	---

7.6.3 Applicability Provisions and Applicable Regulations

Refer to the source-wide conditions in Condition 5.2.2, which address opacity requirements.

7.6.4 Non-Applicability of Regulations of Concern

N/A

7.6.5 Control Requirements

None

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Unit 6 is subject to the following:

None

7.6.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act and 35 IAC 212.107, for both fugitive and non-fugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This test method shall be used to determine compliance with 35 IAC 212.123 [35 IAC 212.107].

- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged. This test method shall be used to determine compliance with 35 IAC 212.301 [35 IAC 212.109].

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1 and this section pursuant to Section 39.5(7)(b) of the Act:

- a. W = Mean vehicle weight (tons)
- b. VMT = Vehicle miles traveled

Records for fugitive road dust shall be calculated on an annual basis, except this calculation shall be updated if substantial changes to the roads occur, i.e. additional roads added.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits of section 5 shall be based on the recordkeeping and reporting requirements in this section and the emission factors and methods listed below:

- a. Emissions from paved roads shall be calculated based on the following emission factors and formulas from Section 13.2.1 AP-42, Volume I, January, 1995:

$$E = k [sL/2]^{0.65} [W/3]^{1.5}$$

PM emissions from unpaved roads = VMT x E

Conversion factors used: 2000 lb/ton

Note: k, sL available in Section 13.2.1 AP-42, Volume I, January, 1995:

- b. Emissions from unpaved roads shall be calculated based on the following emission factors and formulas:

$$E = k [s/12]^a [W/3]^b / (M/0.2)^c$$

E is based upon the emission factor for PM from unpaved roads from Section 13.2.2 AP-42, Volume I, September, 1998.

PM emissions from unpaved roads = VMT x E

Conversion factors used: 2,000 lb/ton

Note: s, k, a, b, c and M are available in Section 13.2.2 AP-42, Volume I, September.

- 7.7 Unit 07: Fugitive VOM Emissions from Leaking River Dock Flare Components
Control: Leak Detection and Repair Program

7.7.1 Description

Leaking valves, flanges, seals, and miscellaneous components are sources of fugitive VOM emissions.

The processes comprising of pumps in light liquid service, pressure relief valves (PRV) in gas/vapor service, open-ended valve or line, valves, all fittings, and various fittings. The processes make up the units that are this natural gas processing plant's sources of fugitive VOM emissions. While these individual fittings and processes at the plant emit insignificant amounts of VOM emissions, the sum of the thousands of fittings are the primary source of VOC emissions at the plant. The procedures outlined in *Protocol for Equipment Leak Emission Estimates* (USEPA, 1995) were used to determine fugitive VOC emission rates for the plant. The NSPS for natural gas processing plants, 40 CFR 60, Subpart KKK, Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants requires that a Leak Detection and Repair (LDAR) program be instated. Expected levels of control for the LDAR were calculated using the method developed in *Protocol for Equipment Leak Emission Estimates* (USEPA, 1995).

Fugitive emissions from equipment components, such as valves, flanges, etc., are generated during the processing of material through the piping distributed throughout the source.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 07	Fugitive VOM Emissions from Valves, Flanges, Seals, and Miscellaneous Components of River Dock Flare	Not Available	Leak Detection and Repair Program

7.7.3 Applicability Provisions and Applicable Regulations

- a. The "affected Fugitive VOM Emissions from Leaking River Dock Flare Components", for the purpose of these unit-specific conditions, are the emission units described in section 7.7.1 and 7.7.2.
- b. The affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC 219.766, Organic Material Emissions Standards and Limitations for the Metro East Area/Leaks, since the facility is a marine terminal as the rule applicability requires.
- c. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.445, Organic Material Emissions Standards and Limitations for the Metro East Area/Leaks: General Requirements.
- d. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.446, Organic Material Emissions Standards and Limitations for the Metro East Area/Monitoring Program Plan for Leaks.
- e. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.447, Organic Material Emissions Standards and Limitations for the Metro East Area/Monitoring Program for Leaks.
- f. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.448, Organic Material Emissions Standards and Limitations for the Metro East Area/Recordkeeping for Leaks.
- g. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.449, Organic Material Emissions Standards and Limitations for the Metro East Area/Reporting for Leaks.

7.7.4 Non-Applicability of Regulations of Concern

- a. The affected Fugitive VOM Emissions from Leaking River Dock Flare Components are not subject to 40 CFR 60, Subpart KKK, Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants since the facility is actually classified as a Petroleum Bulk Storage and Loading facility.
- b. The affected Fugitive VOM Emissions from Leaking River Dock Flare Components are not subject to 40 CFR 60 Subpart LLL, Standards of Performance for Onshore Natural Gas Processing since the facility is classified as a Petroleum Bulk Storage and Loading facility.

7.7.5 Operational and Production Limits and Work Practices

None

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected unit is subject to the following:

None

7.7.7 Testing Requirements

As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.445 which prescribes that the owner or operator of a petroleum refinery subject to 35 IAC Section 219.445 of this Part shall, for the purpose of detecting leaks, conduct a component monitoring program consistent with the following provisions:

- a. Test once between March 1 and June 1 of each year, by methods referenced in Section 219.105(g) of this Part, all pump seals, pipeline valves in liquid service and process drains;
- b. Test once each quarter of each calendar year, by methods referenced in Section 219.105(g) of this Part, all pressure relief valves in gaseous service, pipeline valves in gaseous service and compressor seals;

- c. Inaccessible valves may be tested once each calendar year instead of once each quarter of each calendar year;
- d. Observe visually all pump seals weekly;
- e. Test immediately any pump seal from which liquids are observed dripping;
- f. Test any relief valve within 24 hours after it has vented to the atmosphere; and
- g. Test immediately after repair any component that was found leaking.
- h. Storage tank valves and pressure relief devices connected to an operating flare header or vapor recovery device are exempt from the monitoring requirements in subsection (a) of this Section.
- i. The Illinois EPA may require more frequent monitoring than would otherwise be required by subsection (a) of this Section for components which are demonstrated to have a history of leaking.

7.7.8 Monitoring Requirements

As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC Section 219.446 which provides that the owner or operator of a petroleum refinery shall prepare a monitoring program plan per which contains, at a minimum:

- a. An identification of all refinery components and the period in which each will be monitored pursuant to Section 35 IAC 219.447; [35 IAC Section 219.446(a)]
- b. The format for the monitoring log required by 35 IAC Section 219.448 of this Part; [35 IAC Section 219.446(b)]
- c. A description of the monitoring equipment to be used pursuant to 35 IAC Section 219.447 of this Part; and [35 IAC Section 219.446(c)]
- d. A description of the methods to be used to identify all pipeline valves, pressure relief valves in

gaseous service and all leaking components such that they are obvious to both refinery personnel performing monitoring and Agency personnel performing inspections. [35 IAC Section 219.446(d)]

7.7.9 Recordkeeping Requirements

- a. As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC 219.448 which prescribes that the owner or operator of a petroleum refinery shall maintain a leaking components monitoring log which shall contain, at a minimum, the following information:
 - i. The name of the process unit where the component is located;
 - ii. The type of component (e.g., valve, seal);
 - iii. The identification number of the component;
 - iv. The date on which a leaking component is discovered;
 - v. The date on which a leaking component is repaired;
 - vi. The date and instrument reading of the recheck procedure after a leaking component is repaired;
 - vii. A record of the calibration of the monitoring instrument;
 - viii. The identification number of leaking components which cannot be repaired until turnaround; and
 - ix. The total number of components inspected and the total number of components found leaking during that monitoring period.
- b. Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.

- c. Copies of the monitoring log shall be made available to the Illinois EPA, upon verbal or written request, at any reasonable time.

7.7.10 Reporting Requirements (include reporting of deviations from limits)

As prescribed applicable to marine terminals also by 35 IAC 219.766, affected Fugitive VOM Emissions from Leaking River Dock Flare Components are subject to 35 IAC 219.449, Reporting of Leaks, which provides that the owner or operator shall:

- a. Submit a report to the Agency prior to the 1st day of both July and September listing all leaking components identified pursuant to Section 219.447 of this Part but not repaired within 22 days, all leaking components awaiting unit turnaround, the total number of components inspected and the total number of components found leaking;
- b. Submit a signed statement with the report attesting that all monitoring and repairs were performed as required under 35 IAC Sections 219.445 through 219.448 of this Part.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.5.1, 5.5.3, and 7.7.6 of the affected Fugitive VOM Emissions from Leaking River Dock Flare Components shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors and formulas listed below:
 - i. The average emission factors for oil and gas production operations (Table 2-4 of Protocol for Equipment Leak Emission Estimates, 1995) were used for calculating fugitive VOC emissions for all fittings except valves. The following equation was used utilizing the fugitive emission factors:

$$E_{VOC} = F_A \times WF_{VOC} \times N \times 2.20 \text{ lb/kg}$$

Where:

E_{VOC} = Emission rate of VOC from all equipment in the stream of a given equipment type (lb/hr)

F_A = Applicable average emission factor for the equipment type (kg/hr/source) from table 2-4 of Protocol for Equipment Leak Emission Estimates, 1995.

WF_{VOC} = Average weight fraction of VOC in the stream

N = Number of pieces of equipment of the applicable equipment in the stream.

- ii. For valves, a leak rate is determined from the following equation (Table 2-10, Protocol for Equipment Leak Emission Estimates, 1995)

$$\text{Leak Rate (kg/hr/valve)} = 2.29 \times 10^{-6} \times (SV)^{0.746}$$

Where:

SV = Screening value in ppm (assumed 500 ppm for PTE purposes; also, this is the value certified by the manufacturer that will not be exceeded for 100,000 cycles)

- iii. Calculations of leak detection and repair control (LDAR) effectiveness are based on the methods in Protocol for Equipment Leak Emission Estimates, 1995, USEPA. LDAR is applied to pumps and valves.
- b. LDAR data will be used to estimate emissions from the affected Fugitive VOM Emissions from Leaking River Dock Flare Components. Standard EPA methodologies will be used for these calculations.

7.8 Unit 08: Gasoline Storage Wells
Control: None

7.8.1 Description

The facility operates two (2) a contractor gasoline storage tanks, gasoline tank west of main maintenance shop, gasoline tank wells, and portable 300 gal storage tanks.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 08	Gasoline Storage	None

7.8.3 Applicability Provisions and Applicable Regulations

- a. The "affected Tank Wells" for the purpose of these unit-specific conditions, are the units described in conditions 7.8.1 and 7.8.2.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with Section 215.108 of this Part, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 219.122(b) [35 IAC 219.122(b)].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 219.302, 219.303, or 219.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 219.301].

7.8.4 Non-Applicability of Regulations of Concern

- a. The affected tank well is not subject to the NSPS for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which

construction, reconstruction, or modification commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank well was constructed prior to 1984.

- b. The affected tank well is not subject to the requirements of 35 IAC 219.123, petroleum liquid storage tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m³.

7.8.5 Operational and Production Limits and Work Practices

The affected tank well shall only be used for the storage of gasoline.

7.8.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

Emission limits for VOM are not set for the affected tank well, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically the federal rules for the Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank well to demonstrate compliance with Conditions 5.5.1, 7.8.3, and 7.8.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Design information for the tank showing the presence of a permanent submerged loading pipe;

- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. The throughput of the affected tank well, gal/mo and gal/yr; and
- d. The monthly and aggregate annual VOM emissions from the affected tank well based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected tank well with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any storage of VOL in an affected tank well that is not in compliance with the requirements of Conditions 7.8.3(b) (see also 35 IAC 219.122(b)), e.g., no "permanent submerged loading pipe," within thirty days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank well that is out of compliance with the requirements of Conditions 7.8.3(b) (see also 35 IAC 219.122(b)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;
- c. The storage of any VOL or VPL other than the material specified in Condition 7.8.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

FINAL DRAFT/PROPOSED CAAPP PERMIT
The Premcor Refining Group, Inc. - Hartford Distribution Center
I.D. No.: 119050AAA
Application No.: 96030082
May 27, 2004

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tank well wells to determine compliance with Conditions 5.5.1 and 7.4.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____ **{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms

without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12) (a) (i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions,

methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
 - iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506
 - iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604
- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7) (o) (ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7) (k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Significant Storage Tanks

Table 1 - External Floating Roof Tanks^a

<u>Tank No.</u>	<u>Date Constructed</u>	<u>Nominal Capacity (Gallons)</u>
120-1	1947	5,040,000
120-2	1947	5,040,000
120-3	1953	5,040,000
120-4	1953	5,040,000
120-5	1953	5,040,000
120-8	1957	5,040,000
80-4	1945	3,360,000
80-5	1949	3,360,000
80-10	1953	3,360,000
80-11	1953	3,360,000
20-8	1960	840,000
10-20	1961	420,000
5-10	1954	215,880

^a The tanks above are used to store gasoline with a Reid Vapor Pressure not to exceed 15 (RVP 15) and all volatile petroleum liquids (VPLs) with vapor pressures lower than gasoline, RVP 15. The tanks will also store ethanol. All floating roof tanks have no vapor space and meet the requirement for submerged loading. All tanks were constructed prior to 1972 and therefore are not subject to NSPS.

FINAL DRAFT/PROPOSED CAAPP PERMIT
The Premcor Refining Group, Inc. - Hartford Distribution Center
I.D. No.: 119050AAA
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10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of

minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

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The Premcor Refining Group, Inc. - Hartford Distribution Center
I.D. No.: 119050AAA
Application No.: 96030082
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Application forms can be obtained from the Illinois EPA website
at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for
truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require
the Illinois EPA to deny the application. The Illinois EPA
reserves the right to require that additional information be
submitted as needed to evaluate or take final action on
applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC
270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits?		<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.
	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:
BY:	

	AUTHORIZED SIGNATURE

	TYPED OR PRINTED NAME OF SIGNATORY
	_____ / _____ / _____
	TITLE OF SIGNATORY
	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked

yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
- 8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
- 9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

FINAL DRAFT/PROPOSED CAAPP PERMIT
The Premcor Refining Group, Inc. - Hartford Distribution Center
I.D. No.: 119050AAA
Application No.: 96030082
May 27, 2004

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

SIS:psj

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

The Premcor Refining Group, Inc. - Hartford Distribution Center is located at 201 East Hawthorne, Hartford, Illinois. The source is engaged in petroleum storage and distribution operations.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 01	Vapor Control System: Control Boreholes, Knock Out Drum, Vacuum Blowers (75 Hp/Electric)	1/92	Thermal Treatment Unit (Enclosed Flare)
Unit 02	Marine Vessel Loading	1981 ^a	Vapor Recovery Unit and Flare
Unit 03	External Floating Roof Tanks: 120-1 120-2 120-3 120-4 120-5 120-8 80-4 80-5 80-10 80-11 20-8 10-20 5-10	 1947 1947 1953 1953 1953 1957 1945 1949 1953 1953 1960 1961 1954	 Floating Roof, Primary Seal and Rim-Mounted Secondary Seal, Submerged Loading
Unit 04	Internal Floating Roof Tanks: Group 1 Tanks ^b (Subject to 40 CFR 60, Subpart Kb): 20-3/840,000 Gal 10-10/420,000 Gal	1948/1990 1941/1994	 Internal Floating Roof, Submerged Loading

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 04 (Cont.)	Group 2 Tanks (Not Subject to NSPS): 10-5/420,000 Gal 10-7/420,000 Gal T-3-1/126,000 Gal	1941 1941 1956	Internal Floating Roof, Submerged Loading
	Group 3 ^c (Subject to 40 CFR 60, Subpart K) Tank: 120-9/5,040,000 Gal	1975	
Unit 05	Wastewater Treatment Plant: Entry Points, Two (2) Equalization Tanks, Diffused Air Flotation (DAF) Unit, Two (2) Aeration Basins, Two (2) Clarifiers, Anthracite/Sand Filter.	1973/1994 ^d	Anthracite/Sand Filters
Unit 06	Fugitive Emissions from Paved and Unpaved Roads	---	---
Unit 07	Fugitive VOM Emissions from Valves, Flanges, Seals, and Miscellaneous Components	Not Available	Leak Detection and Repair Program
Unit 08	Gasoline Storage Tanks	Pre-1990	None

^a Refurbished in 1981. A new platform was constructed, a new pipeline was installed to the river dock. The loading berth was reconditioned and all new piping and loading arms installed.

^b Subject to 40 CFR 60, Subpart Kb

^c Subject to 40 CFR 60, Subpart K

^d Installation of two (2) equalization tanks

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	230.30
Sulfur Dioxide (SO ₂)	4.34
Particulate Matter (PM)	12.08
Nitrogen Oxides (NO _x)	35.56

HAP, not included in VOM or PM	----
Total	282.28

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant

Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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